

In re Application of GRIER et al.
Serial No. 09/842,270

Listing of the Claims:

1. (currently amended) A computer-implemented method, comprising:
receiving a request from executable code to load an assembly, the request
not including assembly version data;

building an activation context that distinguishes between versions of
assemblies based on an actual version, the activation context associated with the
executable code in response to the request to load an assembly;

consulting information in a manifest associated with the executable code
and stored separate from the executable code to determine a particular version of
the assembly in response to the building of the activation context; and

providing the particular version of the assembly for use by the executable
code.

2. (original) The method of claim 1 wherein the request corresponds to
a request to load a privatized assembly.

3. (original) The method of claim 1 wherein the request corresponds to
a request to load a shared assembly.

4. (original) The method of claim 3 wherein the shared assembly is
maintained in an assembly cache.

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5. (original) The method of claim 1 wherein consulting information associated with the executable code to determine a particular version of the assembly includes searching for a mapping from a version independent name provided by the executable code to a version specific assembly.

6. (original) The method of claim 5 wherein no mapping from the version independent name to a version specific assembly is present, and wherein providing the particular version of the assembly for use by the executable code comprises providing a default version.

7. (original) The method of claim 1 wherein providing the particular version of the assembly comprises accessing a file corresponding to the assembly and loading the assembly into memory from the file.

8. (original) The method of claim 1 wherein the information associated with the executable code includes a mapping between a version independent name provided by the executable code and a version specific file system path and filename of the particular version of the assembly, and wherein providing the particular version of the assembly comprises returning the path and filename to an assembly loading mechanism.

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9. (original) The method of claim 8 wherein the executable code is stored as an application executable file in a folder, and wherein the version of the assembly is stored as another file in the same folder.
10. (original) The method of claim 8 wherein the filename corresponds to a file in an assembly cache.
11. (original) The method of claim 1 wherein the information associated with the executable code is derived from application manifest.
12. (original) The method of claim 11 wherein the information associated with the executable code is further derived from at least one assembly manifest.
13. (original) The method of claim 1 wherein the information associated with the executable code is constructed during a pre-execution initialization phase.
14. (original) The method of claim 1 wherein the information associated with the executable code is persisted into a non-volatile memory.
15. (original) A computer-readable medium having computer-executable instructions for performing the method of claim 1.

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16. (currently amended) A computer-implemented method, comprising:
building an activation context that distinguishes between versions of assemblies based on an actual version, the activation context associated with executable code, the activation context identifying dependency information;
interpreting the dependency information associated with the executable code, the dependency information identifying at least one particular version of an assembly; and
associating with the executable code at least one mapping based on the dependency information, each mapping relating a version independent assembly name that the executable code may provide to a version specific assembly identified in the dependency information.

17. (original) The method of claim 16 wherein the dependency information is provided in an application manifest associated with the executable code.

18. (original) The method of claim 17 wherein the application manifest is associated with the executable code by being stored in a common folder with an application executable file that corresponds to the executable code.

19. (original) The method of claim 16 wherein at least one mapping maps a version independent name to an assembly stored in a common folder with an application executable file that corresponds to the executable code.

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20. (original) The method of claim 16 wherein at least one mapping maps a version independent name to a shared assembly in an assembly cache.

21. (original) The method of claim 16 wherein the dependency information provided by the executable code corresponds to an assembly having an assembly manifest associated therewith, and further comprising, interpreting the assembly manifest.

22. (original) The method of claim 21 wherein the assembly manifest specifies that a particular version of an assembly be replaced with another version of that assembly.

23. (original) The method of claim 21 wherein the assembly manifest specifies at least one particular version of another assembly on which the assembly having an assembly manifest is dependent.

24. (original) The method of claim 16 wherein the dependency information is interpreted in response to receiving a request to execute the executable code.

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25. (original) The method of claim 16 wherein the at least one mapping is maintained in an activation context, and further comprising, persisting the activation context.

26. (original) The method of claim 25 wherein associating with the executable code the at least one mapping comprises retrieving a persisted activation context.

27. (original) The method of claim 25 wherein associating with the executable code the at least one mapping comprises constructing a new activation context.

28. (original) The method of claim 27 wherein the new activation context is constructed upon determining that an activation context does not exist.

29. (original) The method of claim 27 wherein the new activation context is constructed upon determining that an existing activation may not be not coherent with current policy.

30. (original) The method of claim 16 further comprising, running the executable code, receiving a request from the executable code to load an assembly, the request including data corresponding to a version independent name

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of the assembly and providing a particular version of the assembly for use by the executable code based on a mapping therefor.

31. (original) A computer-readable medium having computer-executable instructions for performing the method of claim 16.

32. (currently amended) A computer-readable medium having stored thereon a data structure, comprising:

a first data store operable to store a first set of data comprising a name of an assembly;

a second data store operable to store a second set of data comprising a version of the assembly;

a third data store operable to store a third set of data comprising at least one item of the assembly; and

a fourth data store operable to store a fourth set of data comprising binding path data to each item in the third set of data;

wherein each data store is operable to provide information to an activation context that distinguishes between versions of assemblies based on an actual version when executable code is executed.

33. (original) The data structure of claim 32, wherein the binding path data comprises a location of a dynamic link library.

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34. (original) The data structure of claim 32, wherein the binding path data comprises an object class identifier.

35. (original) The data structure of claim 32, wherein the binding path data comprises a programmatic identifier.

36. (original) The data structure of claim 32 further comprising, a fifth set of data comprising data corresponding to at least one dependency on an assembly.

37. (original) The data structure of claim 32 further comprising, a fifth set of data comprising data corresponding to a Windows® class.

38. (original) The data structure of claim 32 further comprising, a fifth set of data comprising data corresponding to a global name.

39. (currently amended) A computer-readable medium having stored thereon a data structure, comprising:

a first data store operable to store a first set of data comprising a version independent name of an assembly; and

a second data store operable to store a second set of data comprising a filename path to a specific version of the assembly;

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wherein the second set of data is associated with the first set of data such that a reference to the version independent name in the first set of data is mapped to the specific version of the assembly via the second set of data; and

wherein each data store is operable to provide information to an activation context that distinguishes between versions of assemblies based on an actual version when executable code is executed.

40. (original) The data structure of claim 39 further comprising, a third set of data comprising a version independent object class name, a fourth set of data comprising an assembly name corresponding to a file that contains an object class that corresponds to the object class name in the third set of data, and a fifth set of data comprising a version specific name that corresponds to the third set of data.

41. (currently amended) A computer-readable medium having stored thereon a data structure, comprising:

a first data store operable to store a first set of data comprising a version independent object class name;

a second data store operable to store a second set of data comprising an assembly name corresponding to a file that contains an object class that corresponds to the object class name in the first set of data; and

a third data store operable to store a third set of data comprising a version specific name that corresponds to the first set of data such that a reference to the

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version independent name in the first set of data is mapped to the specific version of the object class;

wherein each data store is operable to provide information to an activation context that distinguishes between versions of assemblies based on an actual version when executable code is executed.

42. (currently amended) A system in a computing environment, comprising:

an initialization mechanism configured to interpret dependency data associated with executable code, the dependency data corresponding to at least one assembly version on which the executable code depends;

an activation context that distinguishes between versions of assemblies based on an actual version, the activation context associated with the executable code and constructed by the initialization mechanism based on the dependency data, the activation context relating at least one version independent assembly identifier provided by the executable code to a version specific assembly; and

a version matching mechanism configured to access the activation context to relate a version independent request from the executable code to a version specific assembly.

43. (original) The system of claim 42 wherein the dependency data is included in executable code manifest.

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44. (original) The system of claim 42 wherein the dependency data is included in an XML file.

45. (original) The system of claim 42 wherein the initialization mechanism persists the activation context.

46. (original) The system of claim 42 further comprising, an assembly loading mechanism configured to communicate with the executable code and the version matching mechanism to load the version specific assembly upon a request by the executable code to load a requested assembly, wherein the request does not include version specific data.

47. (original) The system of claim 46 wherein the assembly loading mechanism loads the version specific assembly from an assembly cache.

48. (original) The system of claim 42 wherein the dependency data identifies an assembly that has assembly dependency data associated therewith, the assembly dependency data corresponding to at least one other assembly version on which the assembly depends, and wherein the initialization mechanism adds information that corresponds to the assembly dependency data to the activation context.

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49. (original) A computer-readable medium having computer-executable modules configured to implement the system of claim 42.